

CLAIMS

1. A brake pedal assembly for a vehicle with a support bracket containing an integral switch, said brake pedal assembly comprising:

a support bracket having a generally planar mounting face, wherein said mounting face includes at least one aperture for securing the support bracket to the vehicle;

a first side wall and a second side wall spaced a predetermined distance apart from said first side wall, and each side wall extends radially from said mounting face, wherein an integral switch portion of said first side wall contains two generally parallel arcuate slots;

a pivot means operatively supported between said first and second side walls;

a pedal arm pivotally mounted onto said pivot means;

a pedal link pivotally mounted onto said pivot means, and operatively connected to said pedal arm, wherein said pedal link is a generally planar member;

at least one pair of contact posts disposed on said pedal link and positioned so as to extend therethrough the corresponding arcuate slot in said integral switch portion of said first side wall;

a conductive means operatively interconnecting each contact post in the pair of contact posts;

a brake booster means operatively attached to said pedal link, and supported by the housing; and

a switch cover plate secured to said first side wall, wherein a switching means is operatively disposed on an inside surface of said cover plate, and said contact posts travel within the arcuate slot in response to movement of the pedal arm to electrically engage said switching means and send an electrical signal to a component in communication with the integral switch.

2. A brake pedal assembly as set forth in claim 1 wherein said first side wall includes an outwardly projecting switch wall defining a perimeter of

the integral switch portion of said first side wall, and said switch cover is secured to said switch wall.

3. A brake pedal assembly as set forth in claim 1 wherein said switch cover plate includes an integrally formed connector for electrically connecting said switching means to a component in communication with the integral switch.

4. A brake pedal assembly as set forth in claim 1 further comprising an upper wall interconnecting said spaced apart side arms, wherein said upper wall is generally parallel to and spaced a predetermined distance from said mounting face and said upper wall includes at least one aperture for securing the support bracket to the vehicle.

5. A brake pedal assembly as set forth in claims 1 wherein said switching means is a printed circuit board.

6. A brake pedal assembly for a vehicle with a support bracket containing an integral switch, said brake pedal assembly comprising:

- a support bracket having a generally planar mounting face, wherein said mounting face includes at least one aperture for securing the support bracket to the vehicle;

- a first side wall and a second side wall spaced a predetermined distance apart from said first side wall, and each side wall extends radially from said mounting face, wherein an integral switch portion of said first side wall includes an outwardly projecting switch wall defining a perimeter of the integral switch, and two generally parallel arcuate slots are contained within said switch wall;

- a pivot means operatively supported between said first and second side walls;

- a pedal arm pivotally mounted onto said pivot means;

a pedal link pivotally mounted onto said pivot means, and operatively connected to said pedal arm, wherein said pedal link is a generally planar member;

at least one pair of contact posts disposed on said pedal link and positioned so as to extend therethrough the corresponding arcuate slot in said integral switch portion of said first side wall;

a conductive strip operatively interconnecting each contact post in the pair of contact posts, wherein said conductive strip includes a plurality of brushes;

a brake booster means operatively attached to said pedal link, and supported by the housing; and

a switch cover plate secured to said switch wall, wherein a switching means is operatively disposed on an inside surface of said cover plate, and said contact posts travel within the arcuate slot in response to movement of the pedal arm to electrically engage said switching means and send an electrical signal to a component in communication with the integral switch.

7. A brake pedal assembly as set forth in claim 6 wherein said switch cover plate includes an integrally formed connector for electrically connecting said switching means to a component in communication with the integral switch.

8. A brake pedal assembly as set forth in claim 6 further comprising an upper wall interconnecting said spaced apart side arms, wherein said upper wall is generally parallel to and spaced a predetermined distance from said mounting face and said upper wall includes at least one aperture for securing the support bracket to the vehicle.

9. A brake pedal assembly as set forth in claim 6 wherein said switching means is a printed circuit board.

10. A brake pedal assembly for a vehicle with a support bracket containing an integrated switch, said brake pedal assembly comprising:

A support bracket having a generally planar mounting face, wherein said mounting face includes at least one aperture for securing the support bracket to the vehicle;

a first side wall and a second side wall spaced a predetermined distance apart from said first side wall, and each side wall extends radially from said mounting face, wherein an integral switch portion of said first side wall includes an outwardly projecting switch wall defining a perimeter of the integral switch, and two generally parallel arcuate slots are contained within said switch wall;

a pivot means operatively supported between said first and second side walls;

a pedal arm pivotally mounted onto said pivot means;

a pedal link pivotally mounted onto said pivot means, and operatively connected to said pedal arm, wherein said pedal link is a generally planar member;

at least one pair of contact posts disposed on said pedal link and positioned so as to extend therethrough the corresponding arcuate slot in said integral switch portion of said first side wall;

a conductive strip operatively interconnecting each contact post in the pair of contact posts, wherein said conductive strip includes a plurality of brushes;

a brake booster means operatively attached to said pedal link, and supported by the housing; and

a switch cover plate secured to said switch wall and wherein a switching means is operatively disposed on an inside surface of said cover plate, said switch cover plate includes an integrally formed connector for electrically connecting said switching means to a component in communication with the integral switch, and said contact posts travel within the arcuate slot in response to movement of the pedal arm to electrically engage said switching

means and send an electrical signal to the component in communication with the integral switch.

11. A brake pedal assembly as set forth in claim 10 further comprising an upper wall interconnecting said spaced apart side arms, wherein said upper wall is generally parallel to and spaced a predetermined distance from said mounting face and said upper wall includes at least one aperture for securing the support bracket to the vehicle.

12. A brake pedal assembly as set forth in claim 10 wherein said switching means is a printed circuit board.